[redacted]

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

SOLAS OLED LTD.

Plaintiff,

v.

SAMSUNG DISPLAY CO., LTD., SAMSUNG ELECTRONICS CO., LTD., AND SAMSUNG ELECTRONICS AMERICA, INC.,

Defendants.

Civil Action No. 2:19-cv-00152-JRG

[redacted]

DEFENDANTS SAMSUNG DISPLAY CO., LTD., SAMSUNG ELECTRONICS CO., LTD., AND SAMSUNG ELECTRONICS AMERICA, INC.'S MOTION FOR SUMMARY JUDGMENT OF NONINFRINGEMENT AND INVALIDITY OF THE '450 PATENT

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

Cases

Undisputed facts establish that no accused product infringes U.S. Patent No. 6,072,450 (the "'450 patent"). Claim 1, the only asserted independent claim, requires a display apparatus comprising "active elements formed over [the] substrate," "at least one first electrode formed on [the] insulation film so as to cover said active elements," and "an organic electroluminescent layer having an organic electroluminescent material formed on said at least one first electrode so as to cover said active elements." It is undisputed, however, that each accused product contains active elements that are not covered by the first electrode. Contrary to the requirements of the claim, and the disclosure of the '450 patent, Solas's expert considered only [redacted] in each pixel of the Accused Products. Further, Solas's expert failed to apply the construction of "active elements" to even the two active elements he considered, and instead analyzed only a subpart of each active element and whether the subpart is merely *partially* covered. Solas's expert also identifies no evidence that the organic electroluminescent layer, [redacted], covers the active elements in the Accused Products.

Additionally, the record establishes that claim 1 is anticipated by U.S. 5,714,968 ("Ikeda"). Defendants' expert explained in detail how Ikeda discloses each and every limitation of claim 1.[1] Solas's expert offered no contrary opinion in rebuttal, and confirmed in deposition that he is not opining on that issue. Thus, Defendants' expert testimony is unrebutted.

Defendants therefore respectfully submit that, based on the record, summary judgment should be entered of non-infringement for all of the accused products and invalidity of claim 1.

I. STATEMENT OF THE ISSUES TO BE DECIDED (L.R. CV-56(a)(1))

1. Has Solas failed to offer evidence on which a reasonable jury could find the

[1] While this brief refers to Samsung Display Co., Ltd., Samsung Electronics Co., Ltd., and Samsung Electronics America, Inc. jointly as "Defendants" for convenience, each is a separate entity that performs different roles as to the manufacture and sale of the Accused Products.

Accused Products contain (1) "at least one first electrode formed on said insulation film so as to cover said active elements, and connected to said active elements through said at least one contact hole," as required by claim 1, and (2) "an organic electroluminescent layer having an organic electroluminescent material formed on said at least one first electrode so as to cover said active elements," as required by claim 1.

2. Is claim 1 anticipated by Ikeda.

II. STATEMENT OF THE UNDISPUTED MATERIAL FACTS (L.R. CV-56(a)(2))

A. The Asserted Claims of the '450 Patent and Applicable Claim Construction

3. Solas asserts infringement of claims 1, 4, 5, 6, and 8 of the '450 patent (the "Asserted Claims"). Claims 4, 5, 6, and 8 depend from claim 1, which recites:

> A display apparatus comprising:
>
> a substrate;
>
> **active elements** formed over said substrate and driven by an externally supplied signal;
>
> an insulation film formed over said substrate so as to cover said active elements, said insulation having at least one contact hole;
>
> **at least one first electrode formed** on said insulation film **so as to cover said active elements**, **and connected to said active elements through said at least one contact hole**, said at least one first electrode being made of a material which shields visible light;
>
> **an organic electroluminescent layer** having an organic electroluminescent material **formed on said at least one first electrode so as to cover said active elements** and including at least one layer which emits light in accordance with a voltage applied to said at least one layer; and
>
> at least one second electrode formed on said organic electroluminescent layer which covers said active elements.

(Dkt. 15-1 ('450 patent) at 17:50–18:3 (emphases added).)

4. The term "active elements" has an agreed-upon construction meaning "circuit elements that have gain or that direct current flow, e.g., transistors." (Dkt. 99 (CC Mem. & Order) at 7.) Thus, transistors are "active elements" within the meaning of claim 1.

B. The Accused Products contain "active elements" that are not covered by a "first electrode."

5. Solas accuses 11 devices of infringing the '450 patent: the Galaxy Note 3, the Galaxy Note 4, the Galaxy Note 4 Edge, the Galaxy Note 5, the Galaxy Note 8, the Galaxy S4, the Galaxy S5, the Galaxy S7, the Galaxy S7 Edge, the Galaxy S8, and the Galaxy S8 Plus (the "Accused Products"). Ex. 1 (Credelle Op. Rep.) at ¶ 115.

6. Defendants' expert, Dr. Fontecchio, has explained, and Solas's expert has admitted, that each accused product contains active elements that are not covered by the alleged first electrode. Ex. 4-2 (Fontecchio Reb. Rep.) at ¶¶ 57–71; *see, e.g.,* Ex. 6 (Credelle Tr.) at 157:7–19.

C. Ikeda discloses each and every element of claim 1 of the '450 patent.

7. The prior art Ikeda reference discloses each limitation of claim 1. Ex. 4-1 (Fontecchio Op. Rep.) at ¶¶ 249–68. Dr. Fontecchio explained how Ikeda discloses each limitation of claim 1. *See id.* Solas's expert offered no contrary opinion in his rebuttal report, and confirmed in deposition that he is offering no opinion on whether Ikeda anticipates claim 1. Ex. 7 (Credelle Reb. Rep.) at ¶¶ 180–202; Ex. 6 (Credelle Tr.) at 209:17–210:5.

III. LEGAL STANDARD

"Literal infringement requires that each and every limitation set forth in a claim appear in an accused product." *V-Formation, Inc. v. Benetton Grp. SpA*, 401 F.3d 1307, 1312 (Fed. Cir. 2005). "Summary judgment of noninfringement is appropriate where the patent owner's proof is deficient in meeting an essential part of the legal standard for infringement, since such failure will render all other facts immaterial." *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316,

1323 (Fed. Cir. 2001). A party "seeking summary judgment of noninfringement may meet its initial responsibility either by providing evidence that would preclude a finding of infringement, or by showing that the evidence on file fails to establish a material issue of fact essential to the patentee's case." *Novartis Corp. v. Ben Venue Labs., Inc.*, 271 F.3d 1043, 1046 (Fed. Cir. 2001).

"To anticipate a claim, a single prior art reference must expressly or inherently disclose each claim limitation." *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1334 (Fed. Cir. 2008). "Anticipation, though a question of fact, may be resolved on summary judgment if no genuine issue of material fact exists." *OSRAM Sylvania, Inc. v. Am. Induction Techs., Inc.*, 701 F.3d 698, 704 (Fed. Cir. 2012); *Leggett & Platt, Inc. v. VUTEk, Inc.*, 537 F.3d 1349, 1352-56 (Fed. Cir. 2008) (affirming summary judgment of anticipation).

IV. ARGUMENT

A. A judgment of noninfringement should be entered because the Accused Products do not contain a first electrode that covers the active elements (*i.e.*, transistors) in the display.

The '450 patent is directed to a display in which the "active elements" are covered by at least one "first electrode" and by organic electroluminescent material formed on the first electrode(s), a design that is disclosed to enlarge the light-emitting area of a pixel while blocking the emitted light from reaching the "active elements" because it can cause "malfunctions." (Dkt. 15-1 ('450 patent) at 2:65–3:7.) Claim 1 requires that a display comprise "active elements" and a "first electrode" that is "formed on said insulation film so as to cover said active elements." (*Id*. at 17:52–61.) Each Accused Product has a display in which there are [redacted]. Each of the [redacted] is an "active element" under the agreed-upon construction, as both sides' experts agree. Ex. 6 (Credelle Tr.) at 126:10–15; Ex. 4-2 (Fontecchio Reb. Rep.) at ¶ 57. Yet, as Solas's expert admits, the alleged first electrode of the Accused Products [redacted] does *not* cover the [redacted]. To the contrary, Solas's expert admits that for each Accused

Product there are transistors that are not covered by the alleged first electrode. The undisputed facts thus establish that none of the Accused Products literally infringes claim 1 or dependent claims 4, 5, 6, and 8 of the '450 patent.

To argue infringement in the face of the undisputed facts, Solas advances an infringement theory that contravenes the plain meaning of the claims, and the agreed-upon construction, in multiple respects. *First*, the claim requires that a display include "active elements" and further requires that "***said*** active elements" be covered, but Solas and its expert argue that only [redacted] in the Accused Products are covered by the "first electrode" and the "organic electroluminescent layer." *Second*, while the claim recites that the active elements are connected to the first electrode by a contact hole, Solas's expert ignores the active elements in the Accused Products that are actually connected to the first electrode by a contact hole; Defendants' expert explains that those active elements are not covered by the first electrode. *Third*, although the claim requires that the "active elements" be covered, Solas's expert considered only one subpart of the active elements (the semiconductor region of a transistor, which he refers to as the "channel," and not the source and drain electrodes of the transistor). This fails to apply the claim construction, which requires consideration of a full transistor or other "active element." Solas's expert further asserts that the semiconductor layer portion of an active element need only be *partiall*y covered, an interpretation contrary to the purpose of the alleged invention and one that would also render the claims indefinite, as a POSA would have no way of determining which active elements would need to be considered and what extent of partial coverage would suffice.

1. It is undisputed that the Accused Products contain active elements, *i.e.*, transistors, that are not covered by the first electrode.

Each of the Accused Products uses the [redacted]:

[redacted]

Ex. 4-2 (Fontecchio Reb. Rep.) at ¶ 26; Ex. 1 (Credelle Op. Rep.) at ¶ 117. It is undisputed that each Accused Products contains at least one transistor per pixel that is not covered by the first electrode (the pixel anode). Ex. 4-2 (Fontecchio Reb. Rep.) at ¶¶ 57–71, Ex. 6 (Credelle Tr.) at 157:7–19 ("In my analysis, I'd have to look through them, but I believe there's always some transistors that are not covered by the pixel electrodes . . . . Yes, there are some that are not covered . . . ."). Thus, the Accused Products do not infringe claim 1 of the '450 patent.

To argue infringement, Solas's expert failed to apply the plain meaning of the claim language. In particular, he considered only a driving transistor, [redacted], and an alleged switching transistor, [redacted], and disregarded all of the other transistors, including the transistors that have contact holes connecting them to the alleged first electrode, based on a flawed interpretation of the claims that would require only that two of the "active elements" be covered. According to Solas's expert, "***it's not necessary for all the transistors to be covered or meet the requirements.***" Ex. 6 (Credelle Tr.) at 156:19–157:6 (emphasis added). Solas's interpretation of the claims is inconsistent with the plain and ordinary meaning of the claim language and the disclosures of the specification. Consistent with the purpose of the alleged invention, a POSA would appreciate that all of the alleged transistors must be covered by the pixel anode.[2]

[2] Although claim 1 is directed to the "display apparatus," which contains three colors of pixels,

Claim 1 requires "active elements formed over said substrate and driven by an externally supplied signal" and then a "first electrode" and an "organic electroluminescent layer" that are formed "so as to cover ***said*** active elements." (Dkt. 15-1 ('450 patent) at 17:52–67 (emphasis added).) The term "said active elements" has a clear meaning: it refers to *the* active elements formed over the substrate and driven by an externally supplied signal, not some subset of them. Contrary to Solas's position, claim 1 does not recite that the "first electrode" and "organic electroluminescent layer" cover only a ***plurality*** of said active elements. Moreover, the claim language referring to "said" active elements—that is, all of the active elements—implements the very purpose of the claimed invention, which is to cover all of the active elements with the first electrode to block them from light generated by the organic electroluminescent layer and to thereby prevent them from malfunctioning.

The Summary of Invention explains that an "object of the present invention" is "to provide a display apparatus which prevents light from entering active elements such as transistors, to thereby avoid the malfunctioning of the active elements." (Dkt. 15-1 ('450 patent) at 3:4–7.) It continues, "[i]n the display apparatus, the at least one first electrode is formed ***so as to cover the active elements***," and "[s]ince the at least one first electrode is made of a material which shields visible light, ***the light emitted*** by the electroluminescent layer ***does not enter the active elements***, ***and therefore the active elements do not malfunction due to the light***." (*Id.* at 3:28–46 (emphasis added).) All of the disclosures of the '450 patent describe a display in which all transistors are covered by the first electrode. Figure 2, shown below, is illustrative in showing that both of the two transistors (selection transistor Q1 and drive transistor Q2) are covered by first electrode (15):

Solas's expert analyzed only a single color pixel (blue) and disregarded that transistors are not covered in the others (green, red). *See, e.g.,* Ex. 6 (Credelle Tr.) at 163:18-23. Nonetheless, for purposes of this motion, Defendants address the blue pixel structures analyzed by Solas's expert.

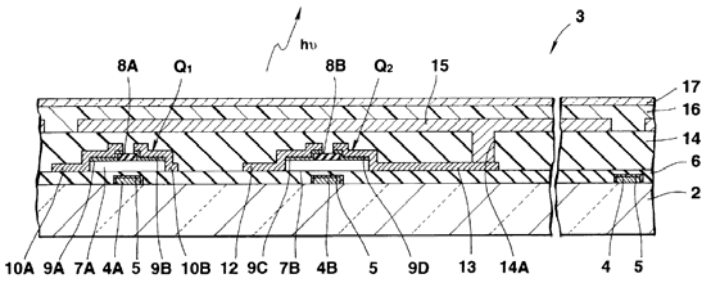

FIG.2

As explained by Dr. Fontecchio, "[t]he '450 patent does not state, or suggest, that it would be sufficient to cover only a subset of the active elements and not cover others." Ex. 4-2 (Fontecchio Reb. Rep.) at ¶ 59. Solas's expert admits that the '450 patent does not disclose any embodiment, or have any disclosure of a structure consistent with the invention, in which the first electrode does not cover all the transistors. Ex. 6 (Credelle Tr.) at 102:25–103:11, 104:14–105:15. On the contrary, uncovered transistors would be left open to light emitted by the OLED and the possible "malfunction" caused by the light that the structure of the '450 patent is designed to prevent. Ex. 4-2 (Fontecchio Reb. Rep.) at ¶ 59.

Notably, any of the [redacted] in the Accused Products could be impacted by light. Thus, according to the teachings of the '450 patent, all [redacted] would need to be covered by the first electrode. But they are not so covered.

Finally, the assertion of Solas's expert that a POSA "would know that it isn't always necessary to cover transistors if they're not sensitive to light," Ex. 6 (Credelle Tr.) at 102:18–21, has no merit. He admits that the '450 patent makes no such distinction and has no teaching of leaving any transistors uncovered. *See id*. at 102:25–103:11. Indeed, his assertion that "the light doesn't really harm the drive transistor" is flatly contrary to the '450 patent, which specifically discloses that the drive transistor (*e.g.*, Q_2) needs to be covered. *Id*. 101:22–23. Moreover, as to the Accused Products, Solas's expert admits that he did not test or analyze the susceptibility to

light of transistors other than and "do[es not] know the light sensitivity of those devices." *Id*. at 132:22–136:17. Thus, even under his own flawed theory, there is no warrant to disregard the other five transistors in each pixel.

2. Solas ignores , which are not covered.

Solas's expert's infringement analysis is fatally flawed for additional reasons as well. Claim 1 clearly requires that transistors that are connected to the first electrode through a contact hole be covered by the first electrode. It is undisputed that the Accused Products contain —yet Solas's expert failed to analyze those transistors. As Defendants' expert explains, they are not covered by the first electrode in the Accused Products.

Claim 1 recites "at least one first electrode formed on said insulation film so as to cover said active elements, and ***connected to said active elements through said at least one contact hole***." (Dkt. 15-1 ('450 patent) at 18:57–61 (emphasis added).) Solas's infringement argument considers only , which are not themselves connected to the alleged first electrode (the pixel anode) of the light emitting diode through a contract hole. Ex. 6 (Credelle Tr.) at 169:25–170:4 are the only transistors connected to of the organic light emitting diode through a contact hole. Ex. 4-2 (Fontecchio Reb. Rep.) at ¶ 74; Ex. 6 (Credelle Tr.) at 131:13–20 . While Solas argues that all of the transistors are electrically connected, Solas's expert acknowledges that Ex. 3 (Ex. A-9 S4 of Credelle Op. Rep.) (emphasis added). The same is true for .

Accordingly, even if the claim only requires showing that a subset of the transistors are covered by the first electrode, the analysis must include the transistors that are connected to the

alleged first electrode through a contact hole—[redacted]. Dr. Fontecchio has shown that in each Accused Product at least one of [redacted] is not covered. Ex. 4-2 (Fontecchio Reb. Rep.) at ¶¶ 72–97. In contrast, Solas's expert has not analyzed whether the Accused Products have a first electrode that covers [redacted]. Ex. 6 (Credelle Tr.) at 169:25–170:4 [redacted]. For this independent reason, the Accused Products could not be found to infringe claim 1.

3. Solas fails to show that the two transistors it analyzes are covered.

Even as to the only two transistors that Solas's expert analyzed, [redacted], Solas's expert has failed to show that these transistors are covered by the first electrode. Instead, his opinions are improperly based on only ***portions*** of [redacted] being covered. Solas's expert's analysis is based on fundamental errors, which conflict with the plain meaning of the claim language.

First, although the claim language states that "active elements" are covered by the first electrode, and "active elements" has been construed to include transistors, Solas's expert failed to apply the established meaning of transistor in his analysis. A transistor indisputably consists of source and drain electrodes, a gate electrode, and a semiconductor layer (also called a "channel" region). Solas's expert admitted this. *See, e.g.*, Ex. 6 (Credelle Tr.) at 57:25–58:16. The '450 patent uses the term transistor according to its standard meaning. *See* Ex. 4-2 (Fontecchio Reb. Rep.) at ¶ 77; (Dkt. 15-1 ('450 patent) at 15:5-8). Yet instead of considering whether ***transistors*** are covered by the first electrode in the Accused Products, Solas's expert only analyzed whether ***one subpart of a transistor***—the "channel" region—is covered. *See, e.g.,* Ex. 6 (Credelle Tr.) at 173:3–19 ("So I focused on—that's why I focused on the channel."). As he acknowledged, he did not analyze whether the other parts of the transistors—namely, the source and drain electrodes—are

covered by the "first electrode."[3] *Id*. at 173:20–174:19 ("I did not count all of the electrodes."). Solas's expert did not consider the full source and drain electrodes, which are indisputably part of the transistors. (*See, e.g.*, Dkt. 15-1 ('450 patent) at 10:15-25 (referring to "[t]he source electrode 10B ***of the selection transistor*** Q1" and "the drain electrode ***of each selection transistor*** Q1.") (emphases added).)

Solas's expert thus failed to apply the plain meaning of the claim language and the claim construction of "active elements." Solas has no evidence that the two ***transistors***—inclusive of the source and drain electrodes—are covered by the first electrode, and thus no evidence of infringement. For that reason alone, Solas has at least a failure of proof.

In addition, Solas's expert's new interpretation of the claim is unsupportable. The '450 patent does not redefine the term transistor. Moreover, nothing in the claim language limits what must be covered to merely the channel region of a transistor. In fact, the claims are not even limited to transistors; they are directed to covering "active elements" more broadly, which, as evidenced by the parties' agreed-upon construction, are not limited to transistors. Solas's expert applies a construction that disregards the plain meaning of the claim and the claim construction.

Second, Solas's expert did not even analyze whether the first electrode covers the channel region of the transistor, but rather only whether the first electrode *partially* covers the channel region. He argues that only an undisclosed—and variable—percentage of the channel region of the transistor must be covered to meet the claims. *See, e.g.,* Ex. 6 (Credelle Tr.) at 148:20–149:7 [redacted], 160:21–161:21 [redacted]

[3] Solas's expert acknowledged that a transistor ("TFT") includes not only the semiconductor layer, *i.e.*, the "channel," but also source, gate, and drain electrodes. *See, e.g.,* Ex. 6 (Credelle Tr.) at 57: 25–58:15 ("Generically that would be a transistor. Yes, there are three contacts, three control points, if you will, for a—for the TFT . . . . The source, the drain, and the gate, yes.").

To illustrate this point, Dr. Fontecchio annotated the metal layers of the accused devices to show the location of the alleged first electrode (green diamond) with respect to the locations of the channels of the alleged active elements (orange).

:

Ex. 4-2 (Fontecchio Reb. Rep.) at ¶ 128. cannot be said to be covered by the first electrode (green). In fact, Solas's expert admits that , Ex. 6 (Credelle Tr.) at 148:20–149:7, and , *id*. at 153:5–11. As Dr. Fontecchio has explained, similar to the Galaxy S5 above, in each of the Accused Products are not covered. Ex. 4-2 (Fontecchio Reb. Rep.) at ¶¶ 99–148.

Solas's interpretation of the claims, *i.e.*, that they permit only ***partial*** coverage of just ***the channel*** of a transistor, conflicts with the very purpose of the '450 patent. As Solas's expert states in his opening expert report, "[s]ince the active matrix OLED display is 'self-luminous,' that is, light is generated by the OLED display, ***it is important to block any light from reaching the TFTs***," not just a percentage of the light. Ex. 1 (Credelle Op. Rep.) at ¶ 77 (emphasis added).

Solas's interpretation not only conflicts with the plain meaning of the claim language and the intrinsic evidence, it would render the Asserted Claims indefinite, as there would be no way of

determining the bounds of the claim. This is evident from the deposition of Solas's expert, who admitted that if partial coverage of channel regions is enough to satisfy the claim then the amount that any given transistor would need to be covered would not be based on any objective measure or disclosure in the '450 patent, because there is no such disclosure:

> Q. So in your opinion, partial coverage of about 25 percent of the transistor suffices to meet the requirement of Claim 1 of the '450 patent if the active elements be covered by the first electrode?
>
> A. So I—***I haven't really put any number on it***. This [redacted] And they generally are—are pretty well covered. So—so if I look at those active elements, ***I would say they're mostly covered, the patent could apply***.
>
> . . .
>
> Q. Is there anything in the '450 patent that conveys how much of a transistor needs to be covered to meet the requirement of Claim 1 that the active element be covered by the first electrode?
>
> A. So the—so the discussion in—in the patent, in the specification, describes the problem of having light leakage and causing a—an inaccuracy, if you will, in the display output. So I think the only metric I would consider is—the only teaching would be these transistors that are light sensitive, whether its amorphous or poly, ***depending how much light sensitivity there is, you might have to cover the entire pixel, the entire transistor, or maybe it's sufficient to just cover half of it***. And I think the teaching, it's not said in black and white, but the teaching to a person of skill in the art would say, this is a solution to cover the—some of the TFTs to prevent light leakage and to increase the area of emission. ***And if it's not being affected, if I only cover half and I don't have any light leakage problem, then that's probably sufficient. That's—that's all I can say***.

Ex. 6 (Credelle Tr.) at 150:5–153:4. Under Solas's theory, whether a transistor is "covered" would be subjective—there is no objective metric for how much is enough—and even the same percentage of coverage could be considered sufficient in one device but not another, leaving the analysis hopelessly indeterminate. This cannot be the proper interpretation of the claim.

B. Solas has failed to provide evidence that the alleged electroluminescent layer covers the active elements.

Claim 1 additionally requires "an organic electroluminescent layer having an organic electroluminescent material formed . . . so as to cover said active elements." (Dkt. 15-1 ('450 patent) at 17:62–67.) Even were there evidence that the alleged first electrode of the Accused Products covers the active elements (which there is not), for separate reasons there is no evidence from which a reasonable jury could conclude that the alleged organic electroluminescent layer in the Accused Products covers the active elements. Solas has failed to provide any evidence that the "organic electroluminescent layer" covers the active elements in any of the Accused Products.

In the Accused Products, [redacted]. As illustrated in the annotated design file for the Galaxy S4 below, [redacted]

Ex. 4-2 (Fontecchio Reb. Rep.) at 114. As shown in the image above, [redacted]

As shown in the below design file for the Galaxy Note 8, as annotated by Solas's expert, Mr. Credelle agrees that :

See Ex. 2 (Ex. A-5 Note 8 of Credelle Op. Rep.) at 3–5).

Solas's expert has asserted that the organic electroluminescent material could, in a device, be deposited beyond the boundaries of the design (*e.g.*, beyond the shaded regions above). However, this speculation does not help Solas, as there is a fundamental failure of proof even were it credited. Mr. Credelle has presented no analysis of any Accused Product to show where the material purportedly extends, and in particular whether it covers the transistors. When asked if he knew, in the Galaxy Note 8 for instance, how far past what he has drawn as the blue, green, and red shaded regions the organic electroluminescent material would ultimately be found, Solas's expert conceded "I don't have any precise measurement of how far out the molecules travel outside of the center target, which is these red, green, and blue targets." Ex. 6 (Credelle Tr.) at 195:16–196:1. He acknowledged that he was similarly unaware of how far out the organic

electroluminescent material travels in the other Accused Products. *See id.* at 196:2–4 ("Q. And that's true for all of the accused products. Correct? A. Correct.").

Thus, Solas has no evidence from which a jury could find "an organic electroluminescent layer having an organic electroluminescent material formed . . . so as to cover said active elements." Solas has no teardowns, testing, or other documents providing evidence that the alleged organic electroluminescent material extends beyond the boundaries shown in the design file in such a way that it covers the transistors in the Accused Products. Although Solas's expert relies on a purportedly "instructive PowerPoint," Ex. 6 (Credelle Tr.) at 207:6–15, he admitted its [redacted]. Solas's expert also cited an image from a product design review document for the Galaxy S4, for what he termed a "haze" that he attributed to organic electroluminescent material, but conceded that he "do[es not] know precisely how far out it goes," *id.* at 192:23–193:11, and he did not analyze whether it covered any transistors.[4] Thus, even if the electroluminescent material could be said to extend beyond the boundaries in the design file, there is no evidence for any Accused Product of how far or, more importantly, that it covers any transistors.

Because Solas has failed to provide any evidence that the alleged organic electroluminescent material of the Accused Products cover the alleged active elements, as required by claim 1, summary judgment of noninfringement should be entered.

[4] Highlighting the lack of evidence as to the Accused Products, Solas's expert relies on a schematic that does not depict Defendants' products, but rather, as he admits, [redacted] Ex. 1 (Credelle Op. Rep.) at ¶ 138 (emphasis added). Solas's expert also relied on a teardown of a product that is ***not*** an Accused Product, [redacted] (which is not accused of infringement). *Id.* at ¶ 137. Although he speculated [redacted] he concedes this is just an "assumption" and he has "[n]o factual basis, just a common-sense basis" for it. Ex. 6 (Credelle Tr.) at 196:11–25.

C. Solas has not alleged or provided expert opinion that the Accused Products meet the "cover" limitations under the doctrine of equivalents.

Solas did not allege in its infringement contentions, nor did Solas's expert provide an opinion, that the limitation of a "first electrode" that is "formed . . . so as to cover said active elements" or "an organic electroluminescent layer having an organic electroluminescent material formed . . . so as to cover said active elements" is satisfied under the doctrine of equivalents. Because the latter limitation was added to overcome a prior art rejection, prosecution history estoppel would preclude such an argument in any event. Ex. 9 ('450 patent, August 31, 1999 Office Action); Ex. 5 ('450 patent, November 30, 1999 Amendment) at 2.

D. Unrebutted expert testimony establishes that Ikeda anticipates claim 1.

In his opening expert report, Dr. Fontecchio explained in detail how the Ikeda reference anticipates claim 1 of the '450 patent. Ex. 4-1 (Fontecchio Op. Rep.) at ¶¶ 249–68. Solas's expert provided a rebuttal report, in which he does not contest Ikeda anticipates independent claim 1; he challenged only whether Ikeda anticipates or renders obvious the asserted ***dependent*** claims. *See* Ex. 7 (Credelle Reb. Rep.) at ¶¶ 180–202. Solas's expert confirmed in deposition that he is not offering an opinion that claim 1 is not anticipated by Ikeda. Ex. 6 (Credelle Tr.) at 209:17–210:5 ("Q. And just to be clear, you haven't identified for Claim 1 any limitation that's not met by Ikeda. Correct? A. I have not opined on Claim 1, that's correct."). Thus, Dr. Fontecchio's expert opinion is unrebutted. Summary judgment is appropriate where, as here, expert testimony of anticipation is unrebutted. *See Suffolk Techs., LLC v. AOL Inc.*, 752 F.3d 1358, 1367 (Fed. Cir. 2014).

Dr. Fontecchio analyzed each limitation of claim 1, and showed how it was disclosed by Ikeda as arranged in claim 1. In brief, Ikeda discloses a display apparatus, *i.e.,* an active matrix display device. Ex. 4-1 (Fontecchio Op. Rep.) at ¶¶ 245–246; Ex. 8 (Ikeda) at 1:5–9. Ikeda discloses that its display apparatus includes a substrate, *i.e.,* a transparent quartz substrate 116. Ex.

4-1 (Fontecchio Op. Rep.) at ¶¶ 247–248; Ex. 8 (Ikeda) at 15:19–20, 15:34–36, Fig. 20. Ikeda discloses forming active elements over the substrate, *i.e.,* thin-film transistors (TFTs) 136 and 137. Ex. 4-1 (Fontecchio Op. Rep.) at ¶¶ 249–253; Ex. 8 (Ikeda) at 15:8–7, 15:34–42, 16:38–39, Figs. 20, 21. Ikeda discloses an insulation film formed so as to cover the active elements, *i.e.,* an SiO_2 layer 120, having at least one contact hole, 108. Ex. 4-1 (Fontecchio Op. Rep.) at ¶¶ 254–256; Ex. 8 (Ikeda) at 15:56–61, Fig. 20. Ikeda discloses a first electrode formed so as to also cover the active elements and shield visible light, *i.e.,* an electron-injection electrode 104 made of MgAg, which is connected to the active elements through the contact hole. Ex. 4-1 (Fontecchio Op. Rep.) at ¶¶ 257–261; Ex. 8 (Ikeda) at 15:56–64, Fig. 20. Ikeda discloses an organic electroluminescent layer formed so as to cover the active elements, *i.e.,* organic thin-film layers 114. Ex. 4-1 (Fontecchio Op. Rep.) at ¶¶ 262–265; Ex. 8 (Ikeda) at 15:19–30. Finally, Ikeda discloses a second electrode formed so as to cover the active elements, *i.e.,* hole-injection electrode 115. Ex. 4-1 (Fontecchio Op. Rep.) at ¶¶ 266–268; Ex. 8 (Ikeda) at Fig. 20. Ikeda thus discloses every element of claim 1.

Based on the evidence of record, including Dr. Fontecchio's unrebutted opinion that claim 1 is anticipated by Ikeda, summary judgment should be entered in favor of Defendants that claim 1 is anticipated. *See, e.g.*, *Suffolk Techs.*, 752 F.3d at 1367 (affirming summary judgment of anticipation where the patentee offered only attorney argument and no expert testimony to rebut the defendant's expert's anticipation opinion); *cf. Webasto Thermo & Comfort N. Am., Inc. v. Bestop, Inc.*, No. 16-CV-13456, 2019 WL 3068192, at *5 (E.D. Mich. July 12, 2019) (granting summary judgment of infringement where Plaintiff's expert's testimony stood unrebutted).

V. CONCLUSION

Defendants respectfully request that the Court enter partial summary judgment that (1) the Accused Products do not infringe the '450 patent, and (2) claim 1 of the '450 patent is invalid.

Dated: July 20, 2020

Respectfully submitted,

/s/ Melissa R. Smith

Melissa R. Smith
Texas State Bar No. 24001351
melissa@gillamsmithlaw.com
GILLAM & SMITH, LLP
303 South Washington Avenue
Marshall, Texas 75670
Phone: (903) 934-8450
Fax: (903) 934-9257

Jeffrey H. Lerner
jlerner@cov.com
David A. Garr
dgarr@cov.com
Jared R. Frisch
jfrisch@cov.com
Grant D. Johnson
gjohnson@cov.com
Daniel W. Cho
dwcho@cov.com
COVINGTON & BURLING LLP
One CityCenter
850 Tenth Street, NW
Washington, DC 20001-4956
Phone: (202) 662-6000
Fax: (202) 662-6291

Robert T. Haslam
rhaslam@cov.com
COVINGTON & BURLING LLP
3000 El Camino Real
5 Palo Alto Square, 10th Floor
Palo Alto, CA 94306-2112
Phone: (650) 632-4700
Fax: (650) 632-4800

COUNSEL FOR DEFENDANTS SAMSUNG DISPLAY CO., LTD., SAMSUNG ELECTRONICS CO., LTD., AND SAMSUNG ELECTRONICS AMERICA, INC.

[redacted]

CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of the foregoing document via the Court's CM/ECF system per Local Rule CV-5(a)(3) this July 20, 2020.

/s/ Melissa R. Smith
Melissa R. Smith

[redacted]